

Claims

Sub part 1

1. An optical fibre connector comprising a housing and an internal core member defining a channel means for receiving an optical fibre, a chamber for receiving a quantity of curable adhesive being in communication with the channel means, the connector including plunger means to reduce the volume of the chamber, whereby adhesive contained in the chamber in use is urged around an optical fibre disposed in the channel before the adhesive cures.
2. A connector according to claim 1, in which the adhesive comprises a two-part epoxy adhesive in which the respective parts are contained in frangible casings.

Sub A1

3. A connector according to claim 1 or claim 2, in which the plunger means includes fibre-engaging resilient means.

4. A connector according to claim 3, in which the resilient means is directionally biassed to maintain on the fibre in use a force which urges it towards the front end of the connector.

Sub A2

5. A connector according to any preceding claim, further including a ferrule at the front end, the ferrule carrying an optical fibre as a stub having a distal end flush with the front face of the ferrule and a proximal end extending from the rear face of the ferrule and terminating in an alignment tube coaxial with the channel means of the internal core member.

6. A connector according to claim 5, in which the fibre stub end has a frusto-conical shape with a flat end face of reduced diameter.

Sub A3

7. A connector according to any preceding claim, in which the plunger means comprises a compression head which is directly activatable to reduce the volume of the chamber and apply pressure to the adhesive therein.

8. A connector according to any of claims 1 to 6, in which the plunger means is indirectly activatable and comprises a compression head within the housing and a co-operating activation member which extends from the housing and which is manually movable to cause the compression head reduce the chamber volume.

9. A connector according to claim 8, in which the compression comprises a sloping ramp surface which co-operates with a sloping ramp surface on the activation member, or in the housing itself, to translate axial movement of the activation member relative to the housing to radially-inward movement of the compression head.

Sub
A4

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10. A connector according to any preceding claim, in which the plunger means includes means cooperable with the housing to maintain the compression head in the inner position.

11. An optical fibre connector substantially as herein described with reference to and as illustrated in the accompanying drawings.

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